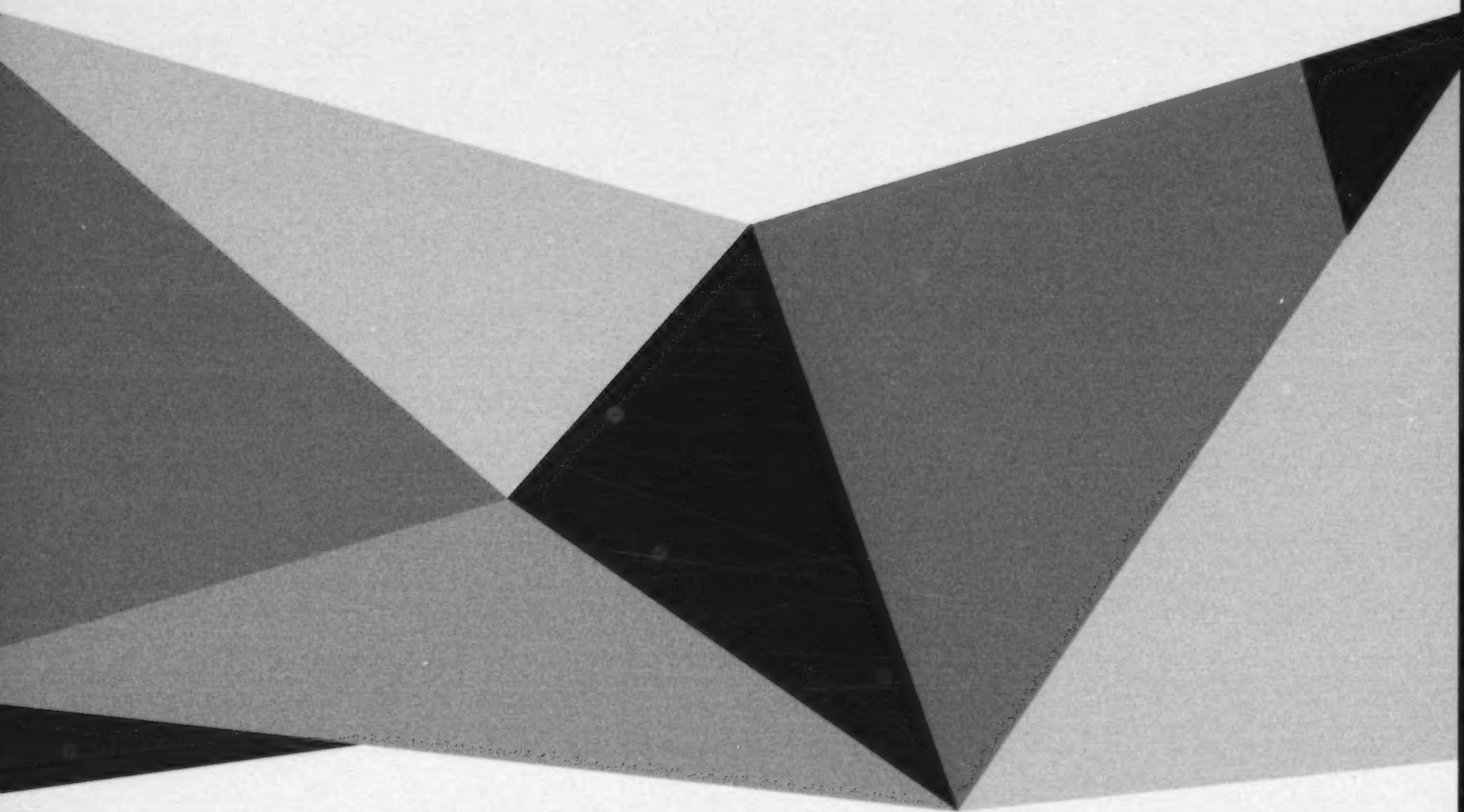
Towards an:
NORTHWEST TERRITORIES
AGRICULTURE STRATEGY

What we Learned



Northwest Territories Industry, Tourism and Investment

October 2015

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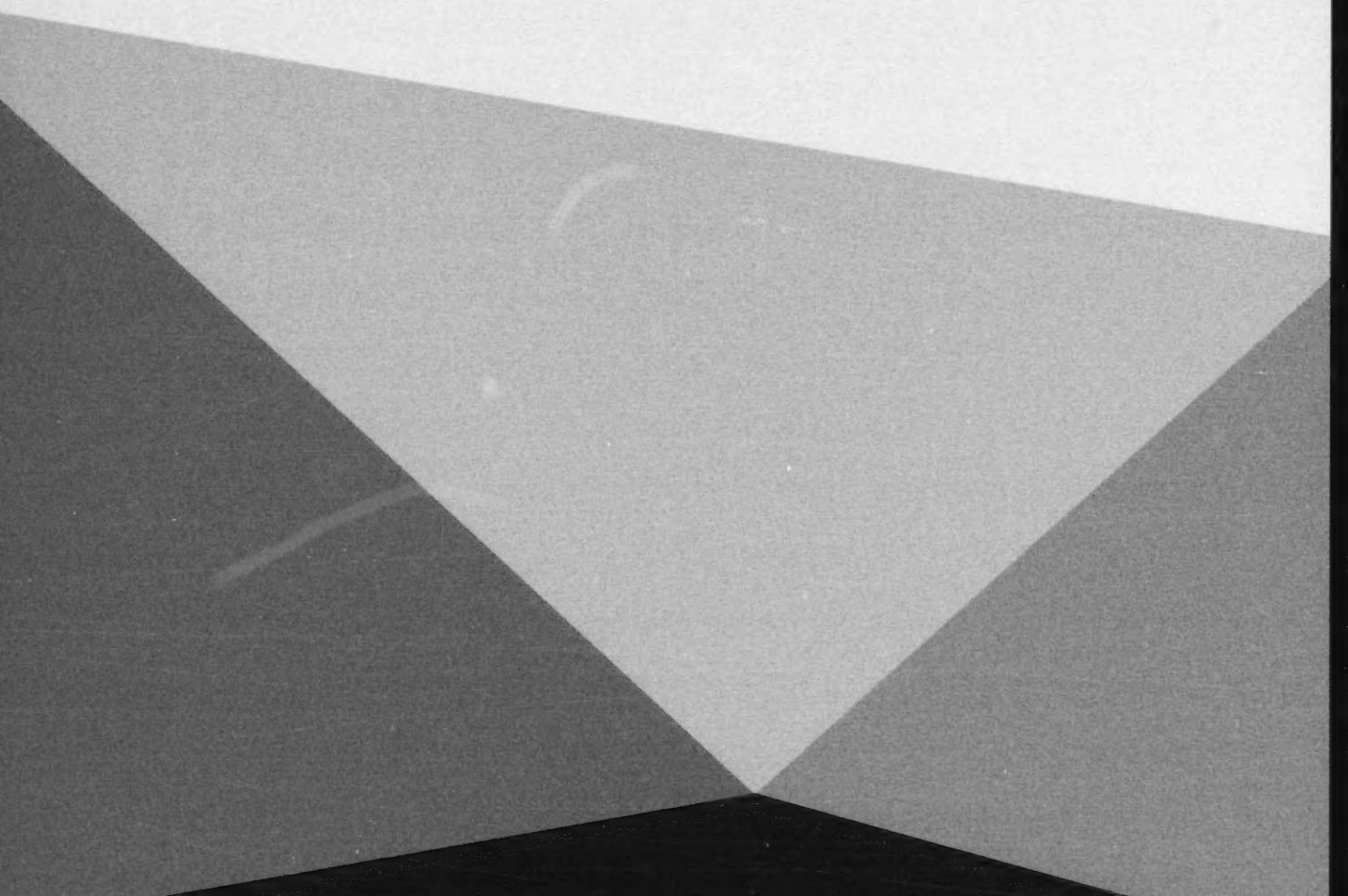

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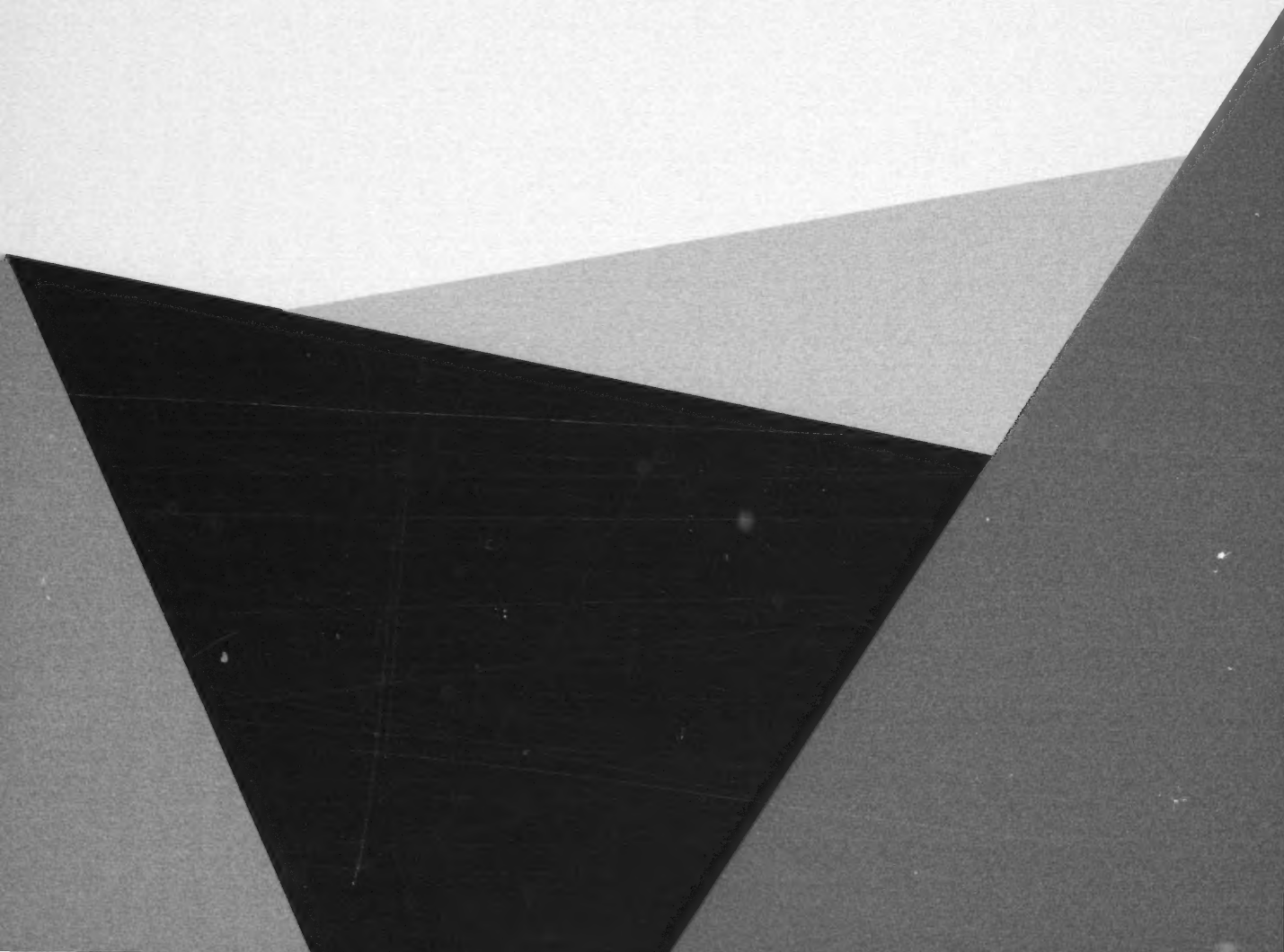


Minister's Message

The Northwest Territories (NWT) has a long, sometimes colourful, history in agriculture development.

It is a sector that has grown significantly in the last decade and now ranges from small community gardens to commercial greenhouses; and from regulated egg production to the harvesting of "wild" edibles.

With the installation of greenhouses in communities on the Beaufort Sea, we now have a food production sector stretching the length and breadth of our Territory.

The NWT Economic Opportunities Strategy (EOS) recognized this potential and identified the Northwest Territories (NWT) agricultural sector as one in which investment, economic growth, employment and income opportunities for NWT residents all exist.

With our Territory's long standing history of farmed and traditional food production; thanks to the investments and hard work of dedicated producers in all communities - and with the support of our partners, including the federal government, we are ready to formalize a strategy that will:

- Increase the availability of locally grown and produced food;
- Offer northerners a more diverse food basket;
- Lessen the cost of food which will impact positively on the cost of living;
- Create opportunities to diversify the economy of many small communities; and
- Contribute to the sustainability of our communities.

In the summer of 2015 the Department of Industry, Tourism and Investment (ITI) advanced a process of community engagements and visits to inform the development of a formal strategy to build the NWT's agriculture sector in the interest of realizing sustainable long term benefits for NWT residents.

The result, the "What We Learned" report, will form the foundation of this Strategy.

The Honourable David Ramsay
Minister of Industry, Tourism and Investment

Introduction and Project Mandate

The Dene and Inuvialuit people of Northwest Territories (NWT) have long harvested their own food, medicines and supplies from oceans, lakes, rivers and lands. Traditional foods remain a significant element in the diet of many northerners today and Aboriginal and non-Aboriginal residents alike take advantage of the plentiful and accessible bounties offered by the territory's lands and waters.

Farming itself, though not a traditional practice, was introduced by the fur-traders and missionaries in established camps, trading posts, schools and churches. Old newspapers, photos and film reels tell stories of market farms selling dairy and produce (such as cabbages and potatoes) from Fort Smith to Aklavik. In 1947, an experimental farm was opened in Fort Simpson.

These early agricultural initiatives continued throughout much of the twentieth century as the NWT remained relatively isolated and the high cost of food, and an inability to attain fresh produce and dairy, provided the incentive for local food production.

As roads were built and better maintained and as air travel became increasingly prevalent, southern foods, including perishables, became more easily and cheaply imported, creating competition for market producers and causing a decline in the local sector.

Agriculture, nevertheless, has persisted and in the 2013 NWT Economic Opportunities Strategy (EOS) was identified as one of NWT's emerging economic sectors. The EOS included five recommended actions to increase economic opportunities for the agriculture sector in the NWT. Foremost among them was the creation of a definitive strategy and policy instruments to guide government investment, support business opportunities and anticipated economic growth.

The community input and public engagement represented in this document is the first step.

Agriculture is a small but emerging sector of the economy.

Motivated by high food costs, positive contributions to lifestyles, local product diversity, and increased awareness of nutritional values, participation in local food production is increasing in most, if not all, communities in the NWT. Ranging from small community gardens to commercial greenhouses, regulated egg production and harvesting of "wild" edibles, the local food production sector has grown dramatically over the past decade. The agricultural sector generates approximately $8-10 million in income per annum in the NWT.

- NWT Economic Opportunities Strategy

State of Food Production in the NWT today

Agriculture is celebrating a resurgence in the NWT and its potential as a growth sector increasingly realized.

Agricultural production in the NWT began as the pursuit of a few individuals to grow food using skills that they had brought with them, or skills developed and borne out of necessity. Its resurgence, however, has been supported by organizations and government - and championed by individuals passionate about food production.

A number of organizations and programs have helped to create spaces for individuals and communities to learn farming practices while creating increased opportunities to access essential infrastructure for industry growth, including land, start-up equipment and technical expertise.

The Territorial Farmers Association (TFA), for example, has been pivotal in implementing a number of initiatives focused on building and growing the NWT's agricultural sector. Other organizations have acquired project funding from federal and territorial governments for varying individual initiatives. Funding and in-kind resource support has also been forthcoming from municipal governments and band councils.

Measuring the size of this sector is challenging. Without a doubt, the size of the sector has grown significantly over the past decades, but statistics collected to date only capture a portion of the current scope of territorial food production. This is partially due to the fact that food production activities, for many of the individuals engaged in it, forms only a small part of a family's sustenance and an even smaller portion of their cash income. Information gathered in statistical data-capture activities does not adequately reflect the growing size of the sector. For example, only twenty-nine NWT farms were reported to Statistics Canada during the 2011 Census. Of those, fourteen indicated that they plant crops, seven produce fruits, and five grew vegetables.

In a recent survey conducted by Ecology North and the TFA (2014), ninety-six responses were received from a variety of commercial agriculture and community / market gardeners. Respondents were from fifteen communities throughout NWT. The number of individuals identifying themselves as "farmers" was still surprisingly small – only one respondent identified as a full time farmer, nine as part-time farmers supplementing their living with farming and four characterized themselves as hobby farmers who "sell some products but do it for fun more than money."

From projects undertaken in recent years, it is apparent that a significant number of NWT residents are producing food either as part of a community initiative or for their own family's consumption. This element of the food production sector is essential to building a critical mass of individuals interested in growing the scope of their operations or the scope of the sector. However, it is also one that is difficult to capture in terms of hard statistics or economic impact.

Commercial agriculture and large-scale production

Egg farming is NWT's largest source of agricultural revenue, contributing up to 2/3 of the annual revenues generated by the agriculture sector and providing direct jobs within the territory. Egg production in NWT was made possible in the late 1990's with the establishment of an NWT egg quota. More recently, the establishment of a private egg grading system with GNWT support has allowed the eggs to be manufactured and distributed directly throughout NWT without first being transported south to a grading facility.

Commercial-scale greenhouses are also significant contributors to the agriculture industry and the NWT economy as a whole, with larger-scale facilities in a number of locations across the territory growing both food and ornamental products.

Eight communities had community greenhouses in 2014, but that number has grown significantly thanks to GNWT funded community initiatives. New greenhouses have been introduced throughout the Beaufort Delta , as in Gamètì. Inuvik boasts a large Community Greenhouse. There are several commercial greenhouses in Yellowknife, one in Fort Smith, one in Norman Wells and one being developed in Fort Good Hope.

Small scale – community and market gardens

Though the production of table eggs in Hay River is by far the biggest example of NWT market farming, there is a wide diversity of significantly smaller-scale commercial initiatives that demonstrate the NWT's agricultural potential. In 2006, the TFA conducted a survey of farms and a similar effort conducted in 2014 by Ecology North in partnership with the Territorial Farmers Association provide some information about the number of farms, their size, crops, successes and challenges.

Most NWT food production is meant for personal consumption with excess product occasionally sold through direct-market opportunities (such as Hay River's Fisherman's wharf and summer market and Yellowknife's summer farmers market). Almost every NWT community now has an active community garden and many are expressing growing interest in market gardening based on their experiences with community gardens and through participation in training offered by the Northern Farm Training Institute (NFTI) and Ecology North.

The NWT has demonstrated substantial potential for food production. The largest immediate potential contribution to the economy of the NWT is the displacement of food imported from outside of the territory. As the number of community and commercial initiatives grows, the economic impact is the reduced out flow of cash for food.

The harvest of wild plants, berries, and mushrooms is also making a significant contribution to NWT diets – and to the economy. As with agricultural products, the picking of wild products contributes both by displacing imported food and through contributions to family income. The harvest of morel mushrooms in 2015 lead not only to direct sales to morel buyers, but also the development of small-scale initiatives to dry mushrooms and sell them directly to consumers.

While the economic value of increased agriculture does have the potential to be significant, there are also additional positive outcomes that are more difficult to quantify and track. Increased food production, at all scales, can be expected to have important implications for the well-being of NWT residents through a number of outcomes:

- Improved health outcomes related to improved and diversified diets
- Improved health related to active lifestyles
- Improved wellness related to stronger community involvement and networks as well as individual and collective control over food choices
- Improved health related to food production techniques
- Poverty reduction by decreasing the cost of accessing nutritious foods
- Economic impact through the displacement of imported foods
- Economic impact through money being spent in the local economy directly and indirectly on crop inputs
- Economic impact by contribution to family income and the expenditure locally of that additional income

Crops that have been grown in NWT include:

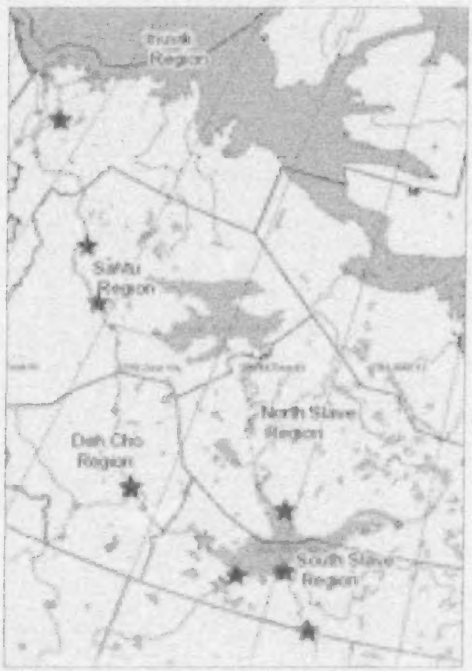
Apples
Asparagus
Beans
Beets
Blackberries
Blueberries
Broccoli
Brussels Sprouts
Cabbage
Carrots
Cauliflower
Celery
Cherry
Corn
Crab apples
Cucumber
Currants
Fava beans
Flowers
Garlic
Haskap berries
Herbs
Icicle radish
Kale
Leeks
Lettuce
Nasturtiums
Onion
Parsnips
Peas
Peppers
Potato
Pumpkin
Radish
Raspberries
Rhubarb
Saskatoons
Spinach
Squash
Strawberries
Summer squash
Swiss chard
Tomatoes
Turnips
Zucchini

Community Dialogues

Methodology

Under the direction of the Department of Industry, Tourism and Investment (ITI), with subject matter expertise commissioned from Serecon Inc., and with the insight, advice and logistical support of the NFTI/TFA and the NWT Association of Communities, a foundational process is being advanced to inform the development of a formal agriculture strategy and to sow the seeds for investments and initiatives that will:

- increase the availability of local food for northern residents;
- reduce the cost of food for northern residents;
- encourage and support the transfer of food production skills;
- incorporate our Territory's traditional food gathering activities;
- support the sustainable development of food production systems; and
- contribute to the sustainability of all communities across the NWT.



Input was received from approximately 200 individuals during public engagements held in the following communities:

- Fort Simpson — May 11
- Hay River — May 12
- Fort Smith — May 13
- Fort Resolution — May 14
- Norman Wells — May 19
- Fort Good Hope — May 20
- Inuvik — May 21
- Yellowknife — May 26

In addition, site visits and interviews were also conducted in Enterprise and Tuktoyaktuk, on May 12 and May 22 respectively.

Considerable awareness was raised for the public engagement meetings and at the opportunity for individuals to have direct input to the government strategy developers.

Posters were hung in all of the communities where public engagements were held. These high-visibility posters announced the opportunity to participate in the public engagements directly. Posters and online invitations provided contact information so that individuals wishing to provide input could do so in a variety of ways, including by telephone to an accessible contact. Posters were customized for each meeting, but the imagery and text generally followed the template shown on the right.

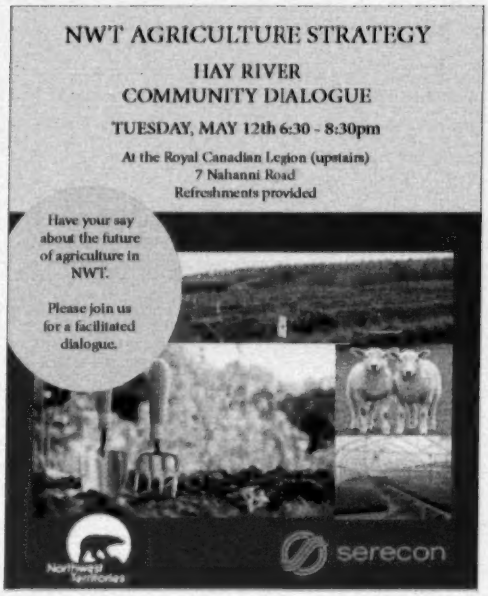

NWT AGRICULTURE STRATEGY
HAY RIVER
COMMUNITY DIALOGUE
TUESDAY, MAY 12th 6:30 - 8:30pm
At the Royal Canadian Legion (upstairs)
7 Nahanni Road
Refreshments provided
Have your say about the future of agriculture in NWT.
Please join us for a facilitated dialogue.
serecon

Figure 1: Sample Poster from Public Engagements

Considerable attention was also brought to the process being used in these consultations through media coverage, including the following newspaper articles:

- DehCho Drum "Gardening fans look ahead"
- Northern Journal "Visions of fresh food dancing in Northerners' heads"
- Northern News Services "Working for a Green Future"

Format

The public engagement sessions were all conducted in a similar manner. The participants were welcomed to the meeting and provided with a very short introduction. The background provided focused information on the development of the EOS. Attendees were advised that strong feedback was given during consultations for the EOS that agriculture should specifically be fostered as an industry, and a need to develop an agricultural strategy.

Participants were then provided an orientation on the process for the engagement workshop. Depending on the number of people attending, the participants were either kept in a plenary session for the entirety (Fort Simpson, Hay River, Fort Resolution and Fort Smith) or broken into smaller groups of 5-10 people per group. (Norman Wells, Fort Good Hope, Inuvik and Yellowknife). The process generally entailed a three-step process:

Vision: Participants were asked to imagine what "thriving agriculture" would look like if they left for 10 years and returned to the NWT in 2025. They were asked to give specific examples of their vision for their community, the territory, and their personal contributions or benefits.

Challenges: Participants were asked to discuss the significant barriers that would need to be overcome to realize their vision for thriving agriculture.

Priorities for Action: Finally, participants were asked to prioritize three key issues that they felt needed to be dealt with, and to propose solutions or actions and identify key individuals or organizations that they felt should be responsible for those actions.

A record of the participants' contributions was kept in two ways: on flipchart papers completed by either participant "recorders" or consulting team members; and on individual exercise sheets that provided spots for text on each of the three headings above.

It should be noted participants in the public engagements were extremely diligent in their completion of the exercise sheets. Many sheets contained extremely thorough and detailed contributions. These notes have been edited to remove any personal information of the writer or those written about, and have been incorporated into this document in summary form and will be provided to the GNWT to ensure that there is a complete record of the input provided by participants.

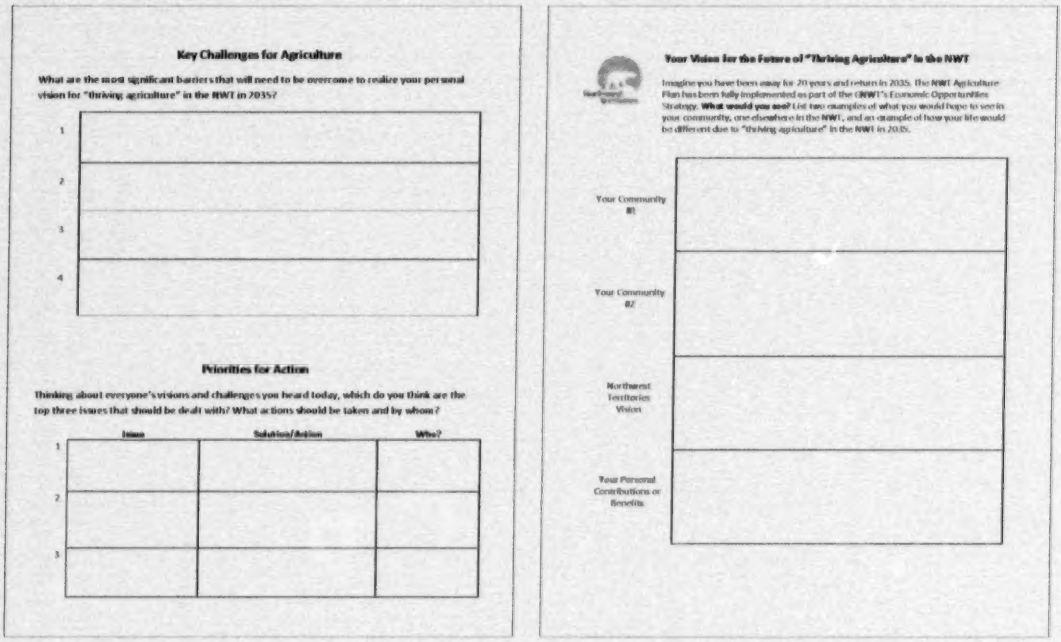

Key Challenges for Agriculture
What are the most significant barriers that will need to be overcome to realize your personal vision for "thriving agriculture" in the NWT in 2035?
1
2
3
4
Priorities for Action
Thinking about everyone's visions and challenges you heard today, which do you think are the top three issues that should be dealt with? What actions should be taken and by whom?
Issue
Solution/Action
Who?
1
2
3
Your Vision for the Future of "Thriving Agriculture" in the NWT
Imagine you have been away for 20 years and return in 2035. The NWT Agriculture Plan has been fully implemented as part of the GNWT's Economic Opportunities Strategy. What would you see? List two examples of what you would hope to see in your community, one elsewhere in the NWT, and an example of how your life would be different due to "thriving agriculture" in the NWT in 2035.
Your Community #1
Your Community #2
Northwest Territories Vision
Your Personal Contributions or Benefits

Figure 2: Exercise Sheets used in Public Engagements

What we learned

The primary purpose of this What We Heard report is to provide a report of the input received from various stakeholders during public engagements and direct interviews. Key themes are identifiable throughout the consultations and from which, overall direction will be realized.

The agriculture community

There is currently a groundswell of support for community-based and community-focused food growing initiatives. This may be due, in part, to recent initiatives supported by ITI, but appears to also stem from strongly-held beliefs that there is a need for improved health and wellness and that this is best achieved through community efforts.

Large differences exist between the NWT's regions in terms of their capacity for crop production, both in terms of the soil and climate, but also in terms of the history and inherit knowledge and support for the growing of local food crops. In addition, even within a single region, there are marked differences between individual communities along the same factors – different soil types and history of agriculture, and the resulting differences in local visions. There is without a doubt a strong need for local community decision-making about the future of food systems in individual communities.

The three most commonly identified positive outcomes of local food initiatives were:

- Food security through improved availability and affordability of healthy food
- Community wellness
- Positive economic contribution through displacement of imported food

Agricultural terminology

A number of stakeholders expressed a concern in the naming of the agricultural strategy itself. In the Inuvik and Sahtú regions, the term agriculture is not as widely understood or accepted as it would be in areas with a longer history of food crop production through agricultural methods. The greenhouse operations in these regions are clearly based on agricultural practices, but the term "agriculture" itself is not as well understood as would be "growing food".

Similarly, there is considerable desire to include in a strategy support for maintaining and expanding the gathering of naturally-occurring native foods in local food supply. The main focus of this for many

stakeholders is the picking of berries, but the gathering of mushrooms and native herbs should also be included. To this end, however, the "growing food" terminology that would be understandable to many as a replacement for the term agriculture would not be sufficiently inclusive.

Categories of production

Three primary categories of food production are evident in the NWT:

- The vast majority of the individuals that attended public engagement sessions were interested in community-focused food initiatives. Of those, the majority again were primarily interested in successful community gardening.
- The second category of production involves growing food either for one's own family or for sharing with other community members but without an exchange of money.
- Lastly, there are some individuals who contribute to their household's gross income through some type of food growing or collection activities. Aside from a handful of truly commercial-scale agricultural operations, there are only a limited number of operations that generate any cash revenue from food. There is, however strong interest by some individuals in moving in that direction.

Knowledge

The most common theme during the "Challenges" section of all public engagement sessions was the need for the dissemination of knowledge about agricultural production. Even many of those actively growing food in some fashion now feel that they are under-equipped in terms of technical expertise for field or greenhouse crop production. There is a clear need for both education and experience to be brought to all three sectors of the agriculture industry and the promise of the NFTI. Participants generally expressed excitement about the possibility that this organization will significantly increase the level of knowledge about agricultural production in the NWT. At the same time, concern was expressed that NFTI would not, without further resources, be able to adequately disseminate that knowledge to their community. There was also discussion about the possibility of leveraging the Aurora Research Institute in similar ways.

Train the Trainer

A common recommendation was made that there would be benefit to having local resources that not only understood how to grow crops, but that those individuals would be equipped to teach others the necessary skills.

In many instances, this discussion became quite detailed, including a number of suggestions that there should be a staggered curriculum from beginning grower to master grower. The most common recommendation was that there should specifically be a "Train the Trainer" course somehow connected to NFTI.

Learn from the Past

Repeated mention was made in many regions of Agriculture and Agrifood Canada's experimental farm in Fort Simpson. There is considerable anecdotal evidence about successful crops at that farm, but it is not known exactly where the records from the experiments conducted are located. And, more importantly, it is not accessible to those individuals who would like to access the information for crop selection or crop management decisions.

Likewise, there have been many instances of agricultural initiatives that have been discontinued, including animal husbandry efforts. Participants feel it would be very instructive to somehow maintain a central repository for documents and information relating to agriculture and to make that widely available online.

Mentorship

There are many great examples of individuals who are already making significant impact in their communities by successfully growing food. These individuals have developed skills and experience that cannot easily be replicated through formal educational endeavours and are willing to share their experience through mentorship of others – regardless of whether the mentees want to participate in community, private or commercial endeavours.

Community Planning

Stakeholders expressed a strong need to develop the motivation in community members to participate in growing or collecting food. As one participant put it, there is a need to "go beyond the supermarket" – to raise awareness about the benefits of growing food, and to generate enthusiasm that will displace complacency about food availability and food security.

Even once motivation is generated, however, participants expressed a need for leadership within their community – a dedicated core group of individuals who are devoted to advocating for increased production of local food, and who will also contribute significantly to the actual implementation.

In fact, many communities already have one or more individuals who are passionate about community-focused initiatives. However, there are two issues that arose repeatedly.

- These individuals were too often left doing the vast majority of the work, with the resulting risk that they will eventually "burn out" and the initiative may cease to exist when their exhaustion surpasses their passion; and
- There is often not a clear succession plan. Some passionate individuals will only live in the community for several years, yet there is often no larger group of individuals that could take over from those key individuals when they leave the community. In several communities we heard about several waves of passionate gardening lasting several years at a time, but sometimes separate by a decade of inactivity.

Marketing Channels

For various reasons, often tied more to community fellowship, there is a strong desire to develop opportunities for the sale of food locally through the equivalent of farmers' markets, which are currently established in only a few NWT communities. Stakeholders felt that this was a natural next step for those that do not already have such a market.

However, there is also a strong desire to have some access to existing retail sales channels for the sale of local food. In particular, there was reference to selling at the Northern and Co-op stores. The consulting team conducted visits to some of those stores and generally found willingness to sell local produce.

The probability and requirements for the development of other supply chain options, including restaurants and institutional food service is less clear and would require further investigation at the local and regional level by individuals developing commercial production opportunities.

Access to Resources

Praise for ITI was received from many of the public engagement participants, particularly with respect to the Small Scale Foods Program that has resulted in the considerable deployment of financial and physical resources in their communities. This was particularly the case with respect to community gardens established in many communities, for which lumber for raised beds, soil, tools and other supplies were provided.

While many participants recognized that local food initiatives must strive to become self-sustaining, they expressed the need for support with respect to start-up and sustained resources, depending on their particular circumstances.

The most common requirements expressed were the need for the following resources:

1. Soil

In almost every community, the soil requires some type of amendment. In different locations, the prevalent surface horizons of the soils in the region (if any) can vary from sand to clay to organic soils from northern bogs (muskeg). The cost of amending the soils is considerable, but there are opportunities to bring some efficiencies of scale to this process. Some communities have begun creating soil in larger batches that can then be made available to various individuals or organizations.

In almost all cases, there is a need to add nutrients, which is most commonly being done through the addition of manures. The availability of manure is also quite limited, resulting in much of the required manure being imported from outside the territory. There is some manure from chickens, horses, beef, and alpacas, but these are of limited quantities and still require considerable transport especially for northern regions.

A common concern raised was that individuals are not aware of the location of the best soils in their area, their ability to access those soils, or the ability to get accurate soil tests completed.

2. Power and Heat

There is a strong desire to establish greenhouses in communities. The majority of these desired greenhouses would be used as starter greenhouses for crops, to extend the growing season by seeding indoors. There are also those that wish to establish longer-season (8-9 months) or even full-year greenhouse operations, but the cost of power and heat is certainly a significant factor for any such operation.

Greenhouse operators, both community and commercial, have brought considerable ingenuity to the heating and ventilation of their greenhouses. Wood boilers were observed, for example, in a number of locations and some are actively building plans to use biomass pellets and/or waste heat in the coming years.

While local community circumstances will need to be taken into account, there were two common threads raised in consultations:

- The possibility of power rates being specifically allocated for agricultural purposes, to increase the feasibility of longer-season operations and reduce the costs for starter greenhouses; and
- The possibility of access to waste heat generated by existing or planned community infrastructure, whether owned by the private or public sector.

3. Infrastructure

The Small Scale Foods Program has given community gardening initiatives access to considerable resources such as lumber, soil, manure, and both hand and power tools. Many of those initial purchases will last many years, but to be sustainable, plans will need to be made for the maintenance and replacement of that infrastructure in due course. There is a growing need to plan for infrastructure replacement, given the current initiatives underway to provide greenhouse resources. Even under better climatic conditions, greenhouse buildings and equipment will require ongoing funding to remain usable.

4. Access to Land

Specific governance issues surrounding access to land differ significantly between communities. The need for land also varies quite significantly. While some small-scale commercial operations would like access to large parcels of 60 acres, many SPIN-based community gardening initiatives only require parcels of less than a single acre. Some would be ideally situated well outside of any built-up area (especially for the production of livestock), while others would be ideally located right in the middle of communities.

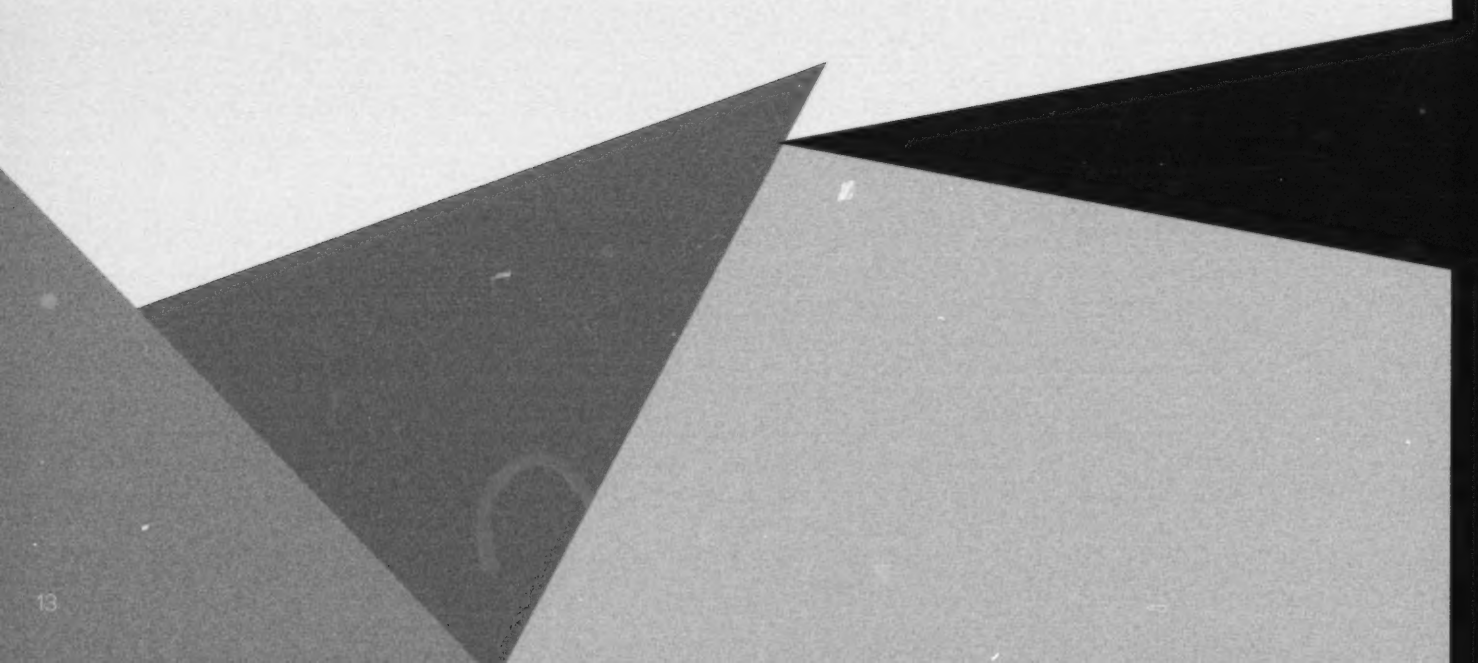
The common thread within all of the "land" issues raised in consultations was the need for certainty. However, it is suggested that a draft strategy will need to raise the issue and suggest that some clarity be brought through the community planning process.

Another element of the land issue is the need for clarity surrounding the use that may be made of existing lands. There would be value to municipal zoning or other municipal bylaws that speak to the issue of food production within municipal boundaries, as there currently are none.

Financial Resources

Underlying all of the above resources is the need for money for the acquisition of those resources (whether by purchase or simply for transportation). While there was appreciation for the funding already brought to the communities by ITI through a number of different funding sources, there will continue to be a need for financial contributions from the public sector.

The issues to be addressed include both administrative and structural changes to public-sector funding programs, as well as access to credit for commercial initiatives.



Conclusion

Supported by organizations and government and championed by individuals passionate about food production, agriculture is celebrating a resurgence in the NWT - and its potential as a growth sector increasingly realized.

Small in terms of cash receipts, this sector contributes to the economy in terms of part-time incomes being earned, wages being paid and multiplied within communities, and goods and services provided. The food produced, while typically not always sold for monetary compensation, serves to displace food that would otherwise be imported from outside the territory.

Food costs in the NWT continue to be one of the major contributors to the high cost of living in most communities and of all the benefits to be gained, the displacement of imported, expensive food is the primary economic motivation behind support for the creation of a strategy document to advance and guide growth in this sector.

The fundamental ingredients in the development of an agricultural or food production industry are the desire, willingness and capacity to grow food. The findings of this report are evidence to the existence of this potential in the NWT – and especially to the hard work and effort of participants in the sector, including those who have contributed their input to the engagement process documented.

The public engagement highlighted in this report will serve to guide and inform the GNWT's development of a made-in-the-NWT strategy that will offer the best opportunity to expand and grow the NWT's burgeoning agriculture sector in an orderly manner - and to realize its full potential for not only producers but for all residents in the NWT.

APPENDIX

Regional Input Received

This section of the report contains a raw summary of the input received from individuals during the public engagement sessions and in conversation with the consulting team.

Throughout this chapter of the What We Learned report, stakeholder input is divided into a number of categories, based on the questions asked of participants in the public engagement sessions. Those questions are reproduced for reference at the beginning of each of these categories:

- Vision:
  - *Community Aspirations*
  - *NWT Vision*
  - *Personal Contributions / Benefits*
- Key Challenges
- Key Action Priorities

Beaufort Delta Region

Imagine you have been away for 10 years and return in 2025. An NWT Agriculture Plan has been fully implemented as part of the GNWT's Economic Opportunities Strategy. What would you see? List two examples of what you would hope to see in your community, one elsewhere in the NWT, and an example of how your life would be different due to "thriving agriculture" in the NWT in 2025.

Community Aspirations

- Diversity and local foods and accessibility for all
- Healthier lifestyle and success
- Year round market
- Cost and quality of food have improved
- With climate change, I see more emphasis on plan species development
  - *2025 – warmer – having plants evolution, longer seasons, more diverse plants*
- Buy all vegetables from Inuvik, and not outside (self-sufficient)
- Increased access to local wild food
- Self-sustainability throughout the Beaufort Delta
- More job opportunities in agriculture
- The Community Garden Society of Inuvik is now a horticulture institute specializing in northern climate gardening training.
- People are healthier and happier and have pride in their accomplishments (grown stuff)
- Education that's given emphasis on a community level (i.e. remote communities) – community level approach
- No fruit and vegetables coming from the south.
- Engagement of all sectors - including elders, demographic and institutions.
- Year round growing
  - *Use of technology*
  - *Geothermal?*
  - *Methane?*
  - *Waste recycling*
- Locally produced food for resale in Inuvik and regional communities.
- Food boxes – buy into community supported system (e.g. Aklavik – produces chickens, Tuk – produces goats, etc.)
- Community kitchen
  - *Makes meals from community grown food*
  - *Commercial aspect as alternate version*

- New, diverse foods (especially with respect to climate change)
- Every home has a garden (on deck; in yard; on balcony; in apt.) Every school, hotel, business has garden
- Small scale neighbourhood gardens (raised beds, shared space, etc.)

NWT Vision

- Opportunity for food exchange
- Using locally grown produce – self-sustainability
- Surplus – inter-settlement exchange
- Utilization of local ETK on native species. Local knowledge teaching young people or south or overstepping the boundary.
- NWT wide forum
  - *On-line forums/feedback re: how to grow, etc.*
- Equity of prices for food between NWT and rest of Canada.
- Seed exchanges throughout NWT
  - *Preservation of heritage seeds/seed bank*
  - *Clarification of regulations around access to country foods and harvesting of.*
- Incorporation of local traditional knowledge of food and other local plants into agriculture activities and goals
- Land reserve/access for growing
- Legal framework (legislation and regulations) to facilitate increased agriculture
- Community chicken coops and building codes permitting such
- Incorporation of increased access to local foods including wild harvested foods
- Incorporation of and growing of country foods
  - *Aquaponics for growing vegetables, produce fish and recycling waste.*
- Compost programs in each community to add enrichment to soils used (inputs from homes, businesses, etc.)
- Roof top gardens using waste heat to help warm

Personal Contributions

- Benefits – own preserved food, own garden and have own chickens and goats
- Healthy eating
- Connecting in school programs
- By growing good quality food, I help keep the prices down/make it affordable
- Education – educating people through employment
- Make people more aware.

Key Challenges

What are the most significant barriers that will need to be overcome to realize your personal vision for "thriving agriculture" in the NWT in 2035?

- Permafrost
- Short growing season/sunlight
- Possibility of invasive plant species
- Winter
- Funding and continuity and high cost of utilities/transportation
- Better facilities and infrastructure

Beaufort Delta Region *(continued)*

- Cultural acceptability "we're not farmers" . . . They're hunters and trappers – cultural differences - selling food from the country is "taboo"
- Inter-settlement trade
- Qualified community educators
- Lack of knowledge and best practices
- Acceptance – specifically hemp
- Lack of leadership and engagement
- Land regulations
  - *Land ownership/public housing obstacles*
  - *Insurance regulations. (e.g. Can't have chickens)*
  - *Bylaws – not currently supportive of agriculture (e.g. Chickens = pets; # of goats, rabbits allowed, etc.)*
- Climate limitations
- Community interest and participation
- Perceptions of local agriculture (e.g. Goats next door . . .; manure; soil – dirt, etc.)
- Education – knowledge of agriculture and horticulture techniques, animal husbandry.
  - *How to access funding resources and training resources*
  - *Need regional education centres with knowledge of local/growing conditions. (e.g. Difference between conditions in Inuvik vs. South Slave)*
- Infrastructure
  - *Soil (and knowledge of soil condition to make proper amendments if needed)*
  - *Land*
  - *Nutrients for soil*
  - *Greenhouses and structures*
- Transportation (of agricultural items) is limiting (e.g. Quarantine, cross border, Wildlife Act . . .)
- Reliability of production (to buy/sell/exchange)
- Community networks and inter/intra (for exchange of knowledge/produce, etc.)
- Credit for commercial businesses – anyone wanting to borrow has to go to Edmonton. The only bank has only a $5,000 limit
- The amount it takes to just live, with milk at $11.59 for 4 litres, Tide at $39.99 for 4.6 litres.

Key Action Priorities

Thinking about everyone's visions and challenges you heard today, which do you think are the top three issues that should be dealt with? What actions should be taken and by whom?

- Programs – Personal;
- Targeting – Community;
- Scale – municipal;
- Identify local priorities.
- Who: Partnerships – private, gov't, individual

Beaufort Delta Region *(continued)*

Issue	*Solution/Action*	*Who?*
Education (perception, community interest, networking skills)	More local workshops in more places Advocate to gov't Food in schools Curriculum integration More support and extracurricular	Greenhouse people Gov't – aboriginal, federal, GNWT, Local Municipal planning and support District (boards) Non-gov't advocacy
Land Regs/Access (clarity first. Where, how many/what.) Plain language. Summary doc – NWT/local. Ownership structure – interactive GIS. NACA has model.	Implementation of CTS courses Advocate community Start local!	Youth centre Inuvik school of model ECE
Infrastructure supplies – soil, greenhouse, raised beds, boxes (cold frames)	Municipal composting system	

Sahtú Region

Imagine you have been away for 10 years and return in 2025. An NWT Agriculture Plan has been fully implemented as part of the GNWT's Economic Opportunities Strategy. What would you see? List two examples of what you would hope to see in your community, one elsewhere in the NWT, and an example of how your life would be different due to "thriving agriculture" in the NWT in 2025.

Community Aspirations

- Our New Vision for our Community; healthiest people in the Sahtú Region, and the world!
- in my community"
  - *Each home has their own greenhouse and garden plots*
  - *Root cellar*
  - *Seed saving program*
  - *Community composting program*
  - *Canned food preserves*
  - *Simple technology and should be affordable*
  - *Large joint ventures*
    - *Knowledge transfer*
    - *Long term investment in the soil (sustainability)*
  - *Increase intake of traditional foods*
  - *Increase in community involvement*
  - *Animal husbandry*
    - *Collect the manure, eggs, meat*
  - *Thriving berry fields (raspberries, Siberian huckleberries)*

- *Community cold storage*
- *More fresh fish*
- *Involve youth*
- *Community gardens*
- *More gardens/greenhouses in homes including housing units and school*
- *More commercial enterprises*

- *local supply of compost*
  - *Develop local sources of compost instead of importing*
  - *Local tourism businesses can benefit*
  - *80% more gardens*
  - *Less imports for vegetables*
  - *More pigs, chickens, cows*
  - *More families feeding themselves*
- *Greenhouse*
- *More training – learn what and when to plant*
- *Harvesting info. – storage/preserves*
- *Employment*
- *Start-up funding in place – funding programs*
- *Able to feed own family from what you grow*
- *Sustainable*
- *Teamwork within family*
- *Cheaper food*
- *Healthier*
- *My community*
- *More workshops about gardening*
- *learn recipes, make cookbooks*
- *community garden has school involvement*
- *sustainable gardens*
- *teamwork within families*
- *see more flower gardens*
- *leadership*
- *expansion of usable land*
- *harvesting berries, making jam*
- *Other Community – Norman Wells*
- *Local restaurants and hotels producing their own produce*
- *Community composting*
- *Sharing of produce*
- *Increase growing capacity, e.g. Potatoes*
- *Sell chickens, eggs*
- *Greenhouse – plants, flowers veggies, carrots, tomatoes, potatoes*
- *Renewable energy – wind mills; solar panels*
- *School garden program*
  - *Education in agriculture (secondary too)*
- *Save money by having local food*
- *Gardening program for the local school*

Sahtú Region *(continued)*

- *Summer jobs – cleaning town, plant gardens,*
- *cutting grass, clean the lake*
- *Training for heavy equipment operators (big tractors)*
- *Soil testing*
- *Healthy food for healthy people*
- *Community greenhouse*
- *Composting site (community)*
- *Community garden*
- *Small scale home gardens*
- *Community storage/cooler*
- *Education/workshops*
- *Community database*

• Benefits
  - *Exercise*
  - *Relaxing – like meditation*
  - *Like being on the land*
  - *Know what you are eating*
  - *Reward for work*
  - *Youth learn healthy lifestyles*
  - *Farmer's market every Saturday*
  - *All year round greenhouses*
  - *Children participating/involved*
  - *Healthier people/less chronic diseases*
  - *Water conservation*
  - *Professionally trained young people*
    - *Start in elementary schools*
  - *Each household has a garden/compost*
  - *Sell local produce to stores/public institutions*
  - *Agri-tourism*
  - *Organic/respect for the land*
  - *Traditional medicine centre*

NWT Vision

- Grant/funding programs for start-ups
- Training programs
- Publications - "how to" books
- Reallocation of federal food programs
  - *E.g. – instead of subsidizing cans, subsidize produce growing*
- Gardening and agriculture as part of school curriculum
- Parent ownership
- Government support – funding/grants for start up
- Donate to elders
- Sell on-line
- Community greenhouse – year round

- Community gardens
- More compost
- People working in agriculture
- More workshops in the school
- Chickens, pigs, cows, goats
- Farms
  - *Berry*
  - *Dairy*
- Machinery – farm tractor
- Farmers' market
- Food production
- Fishing – opportunity
- Scholarships
- Wild mushrooms
- School curriculum includes agriculture
- Cheaper fruits/vegetables - - increase health and quality of life
- Organic produce
- School gardening program

Personal Contributions

- Start small – provide starter kits
- Talking
- Promoting
- Willing to pay more to buy local
- Speak to leadership re: importance
- Promote opportunities to northern living

Key Challenges

What are the most significant barriers that will need to be overcome to realize your personal vision for "thriving agriculture" in the NWT in 2035?

- Consistency
  - *Keeping people motivated*
  - *Annual programming*
  - *Never give up/never say die*
- Money
  - *Volunteer burn-out ($ does not cover labour costs)*
  - *Community partnership/community service hours*
- Housing – left over building supplies for boxes
- ECE – social assistance comm. hours for labour hours.
- Work
  - *Not enough time in the day*
  - *Employer support i.e.: allow an hour or two to garden during the growing season*
  - *Specialized help for the summer (living in the community) – with school gardens, help with garden/plant problems*
- Each home has their own greenhouse and garden plots

Sahtú Region *(continued)*

- Motivation and attitude
- Location
- Soil
- Root cellar needed
- Set temperature – greater than zero (not for long)
- Seed saving program needed
- Coordinator needed
- Community composting program
- Bears
- Costs for infrastructure and maintenance, tools
- Canned food and preserves
- Grow the food
- Supplies
- Greenhouses or agriculture: simple technology and should be affordable.
- Freight
- Large joint ventures
- Knowledge transfer
- Long term investment in the soil
- Requires permanent site
- Requires time, HR programs, elementary and adult education centre
- Increase intake of traditional food
- Requires time and supplies
- Lack of awareness and benefits
- Increase in community involvement
- Lack of interest
- Animal husbandry
- Collect the manure, eggs and meat
- No hay, no barns
- Certain plants can grow in 24 hr light
- Permafrost
- Grant programs for start-ups
- Training Programs
- HR and $$
- Reallocation of federal food program
- Politics
- Infrastructure ex. Places to preserve, extra freezer for storage, heated root cellar
- Committed people
  - *Takes a lot of work*
  - *Encourage with knowledge/support*
- If kids want to do something then parents get involved
- There are day camps to continue what starts at school
- Fear/lack of confidence
- Currently not busy (limited benefit – kids get ownership
- Hesitation re: livestock
- Disease transmission

Sahtú Region *(continued)*

- People harvest meat traditionally
- Weather in Délınę
- Too cold, need heated greenhouse
- Season too short on either side
- Plants need acclimatizing
- Climate, weather, Not enough sunlight
  - *Grow lights*
- Enough product is challenge
- Start small
- Communicate
- Need opportunities to inspire
  - *Confidence*
  - *Inspection*
  - *Celebration*
- Language barriers – need translation
- Utility and energy costs
- Transportation costs
- No agriculture lots available – suitable land – lots of dust in communities
- Lack of local agriculture supplies
- Knowledge – goes with people – training is needed
- Motivation and ambition
- Community compost
- Water – irrigation systems – none
- Traditional knowledge – need to capture
- Cost – logistics – planning
- Funding to start a garden
  - *Greenhouse equipment, seeds, plants, fertilizers, clothing*
- Summer is for fun (student)
- Leaders are hard to find
- Modern technology
- Permafrost thaw ruins the ground for growing
- Right location – drainage
- Patience
- Commitment
- Resources
- Workshops – community radio
- Capital projects – greenhouse, community gardens
- Local knowledge – elders
- Poor soil – identify good ground around community, soil testing
- Season projects – planning is needed season-specific ex. fish, berry, mushroom season
- Motivation – how to get people interested
- Active/reliable workers/volunteers to run/maintain
- Vandalism could be an issue
- Lack of knowledge/education

Key Action Priorities

Thinking about everyone's visions and challenges you heard today, which do you think are the top three issues that should be dealt with? What actions should be taken and by whom?

Issue	*Solution/Action*	*Who?*
Permafrost and short growing season and long cold winters	Build better facilities and infrastructure	Greenhouse people Gov't – aboriginal, federal, GNWT, Local Municipal planning and support District (boards) Non-gov't advocacy
Lack of funding and high cost of utilities/transportation	P3 partnership investment Alternate energy sources (solar, wind, bio-fuel)	Public, private
Leadership/acceptance/ education	High school subject/training programs/horticultural university	High school teacher/Aurora Research Institute partner with the Inuvik community greenhouse

- Leadership
- Permanent Community Garden Site
- Knowledge Transfer
- Education – more workshops in school, pair elders and youth together
- Cost – more funding required
- Lack of soil/land – community run compost pile, more designated agricultural land
- Getting people to see the value of growing own food
- Getting greenhouses and garden plots available to all
- Training
- Community Greenhouse
- Community needs to be involved
- Gardening/agriculture has to be sustainable
- Funding and grants for those interested in gardening
- Develop workshops and educational planning
- Build on existing resources
- Resource library
- Training blitz
- Elders get involved
- Poor soil – develop source of local soil – sand, clay, black dirt mixture
- Motivational awards – gardening awards, yearend community feast, Facebook, posters, competitions
- Sharing/learning should be regional
- Kids growing – help in school (in their learning)

Sahtú Region *(continued)*

- *Fundraising (selling what they grow)*
- Integrated into everyday life – from growing/preserving
- Community freezers (storage)
  - *Ex. Especially northern – not wasting food*
- Encourage sharing
- More segregation at landfill – including composting – cleaner
- Community compost – one has started in Délınę
  - *More training needed*
  - *Have more training*
- Dogs/mutts getting into gardens – people need to train dogs
- Bylaw officers can help keep gardens secure
- Build ownership with youth
- Acknowledge volunteers
  - *Annually, nationally*
  - *Hamlet role (leaders)*
- Leaders need to get involved
  - *Get hands dirty*
- Infrastructure includes garden
  - *Greenhouses/gardens need to be at school*
- Agriculture exchange
  - *Tour other sites*
  - *Bring in experts – teachers*
- Training
  - *Start with small brochure*
  - *Starter kits*
  - *Young camp – inspire kids*
  - *Hamlet*
    - *Hire summer students with agriculture skills*
    - *Ag exchange*
  - *Funding requirements*
    - *Fundraising*
    - *Partnerships - local, GNWT, national governments*
    - *Grow hemp*
- Infrastructure
  - *Business partnerships (sponsors – transportation)*
- Supplies
- Identify local teachers
  - *Plan workshops now for next year and prepare infrastructure*
- Access to resources
  - *NW: black dirt – where do we access it?*
- Lake of community engagement
- Where to apply for funding?
- Finding good areas to garden
- Finding a person to teach gardening

  - *Regional/community summer staff*
  - *Visit spend time in communities*
- Lack of support
  - *Volunteer burnout*
- Selling produce and animals goes against cultural values
- Communication
  - *Advertising*
  - *Getting the word out*
- Getting people to understand and accept that local grown food can be better than store-bought food

Other Input

- Hire local people who can train
- Délınę – more education; videos, how to plant potatoes; Hands-on (bring things home) ex. composting
- Soil testing
- Harvesting
- Planting/seedling – starting
- Expertise – agrologists
- Preserving workshops
- Accessible supplies
- Buy seeds in communities
- Tool lending (community)
- Soil (Délınę took advantage of winter road to bring in manure)
- Preserving supplies
- Worms
- Could stock in one central community
- Good soil
- Good location, sufficient land (now)
- Annual trade/share with workshops
- All communities meet and trade – once annually
- Different foods and share knowledge
- Polar eggs sold locally
- Local food in stores
- Local people become suppliers
- Excess sold at stores
- Communities build own greenhouses
- Greenhouses for individuals
- Need local, permanent resource person
- How-To Book (frequently updated)
- Community self-sustained
- Community garden market
- Employment through agriculture
- Operator (equipment)
- Summer students

- Part of education - start young
- Sharing/interaction/partnerships between communities
- One larger garden/flowers/trees in a place that is welcoming for everyone
- Easily accessible
- Central location
- Within walking distance

North Slave Region

In person workshops in the Tłı̨chǫ region were not achieved in spite of efforts to do so because of a busy regional schedule during the consultation months. The team was able to hold a phone interview with the Senior Administrative Officer (SAO) in Gamèti, who has coordinated several food production projects in that community.

The discussion covered the recent history of food production in Gamèti, its current context and the vision for future initiatives. An earlier gardening initiative was undertaken at the hotel site so that locally grown food could be served as part of hotel meals. Once the SAO began working in the municipal government, the gardening initiative was expanded to respond to the five year goals identified by community members in their strategic planning initiative.

Gamèti currently boasts 43,000 square feet of gardening space and has received a large greenhouse that will be operational in the 2016 summer season. Heat from a wood boiler burning locally harvested cordwood will extend the growing season. Community staff is propagating trees to replant cut areas to ensure that wood harvesting is sustainable. More recently, small livestock has also been added to the initiative with meat chickens, egg chickens and hatchery chickens. The community also has goats and hopes to add pigs and rabbits.

The garden is divided into regions with various co-operative groups taking responsibility for their respective sections. Groups include: the health centre, community employees, the council, the high school, out-of-school youth, mothers and elders. About sixteen families and an estimated fifty people are actively involved in the upkeep and harvesting of the gardens. Ten percent of everybody's harvest is saved so that seeds can be kept for the subsequent year. Two student interns are planting, watering and weeding as summer jobs supported by the Department of Education, Culture and Employment. Gamèti also maintains an emphasis on experimentation. Rice and corn have both been attempted with the corn doing well but the rice proving to be an inappropriate crop for the region. In the future, the community will be experimenting with sorghum and sunflowers in an effort to identify an appropriate locally grown feedstock. Fireweed has been used as a feed with the goats responding well. A next step is to strengthen youth involvement with a more elaborate high school program. Students will be responsible for gardens and small livestock with an emphasis on maintaining the initiative as a sustainable small business. Additional investments in preservation and marketing are also planned.

Initiatives in Gamèti have been supported by the GNWT through the Departments of Industry, Tourism and Investment, Health and Social Services, Municipal and Community Affairs and Education, Culture and Employment.

Ultimately, the community's vision is to be self-sufficient in food.

Summary of recommendations for GNWT Agriculture Strategy:

1. Food production needs to be approached with community development principles.

The success to date of Gamèti's programs is attributed largely to the collaborative planning approach that was used. The municipal government worked with a broad range of community members to identify a shared vision and goals for community development as well as to identify those challenges that prevented objectives from being achieved. A focus on food production emerged from that vision because it focused on a variety of identified goals including: training skilled workers; being self-sufficient in food by complementing harvested meats with locally produced fruits and vegetables; and targeting poverty by producing healthier, more affordable food options.

2. Small changes and steps need to be valued.

With small numbers in NWT communities, improving opportunities for even one family has value.

3. Focus on training and economic development opportunities.

Gamèti's food production initiative is conceived as training and economic development. Learning food production skills is one approach to increasing individual skill members and is complementary to other local initiatives such as training in small vehicle mechanics and sewing.

4. Support local opportunities for hands on training

Training for individuals that requires travel to regional centres or to Yellowknife can be challenging because it requires separation from family members and often presents several distractions that detract from study and learning opportunities. Opportunities for hands on learning and skilled training in place will be central to the success of initiatives in small communities.

5. Support marketing to create a recognized product

There will be increasing opportunities for sales of excess produce with additional investments in preservation and marketing.

6. Support research and ensure results are communicated in plain language

Those that will be using research results are not academics and research should be presented appropriate to its target audience. GNWT can support research in various places so that learning is spatially relevant with the resulting knowledge housed in a centralized area.

Yellowknife Region

Imagine you have been away for 10 years and return in 2025. An NWT Agriculture Plan has been fully implemented as part of the GNWT's Economic Opportunities Strategy. What would you see? List two examples of what you would hope to see in your community, one elsewhere in the NWT, and an example of how your life would be different due to "thriving agriculture" in the NWT in 2025.

Community Aspirations

- Farm huge garden and a place to sell commercially
- Fish plan established, berries and dry meat, dry fish (smoked)
- Commercial greenhouse
- Commercial agricultural plots
- Berry farms
- Commercially grown chickens, eggs, cows
- Fertile soil/gardens for everyone L or S
- Local commercial agriculture thriving which is driving down nutritional food costs
- Every house with arable land has a garden
- Community gardens within a km of every resident
- Market gardens surrounding YK
- Small animal production – chicken, goats, rabbits, etc.
- Con Mine geothermal being used to power a commercial greenhouse
- Community: helping; sharing; support; self-sufficiency
- Selling: market; direct
- Growing food: meat/livestock – limited to small animals north; root crops (storable); others that can be frozen

Yellowknife Region *(continued)*

- Infrastructure: greenhouse (geothermally heated); commercial space/market; freezer/cold storage
  - *Leverage existing community freezers*
- Local food growers could make a living from growing (career)
- Less lawns, more gardens
- Reduce price of local vegetables
- Commercial size greenhouse – that uses solar panels, biomass, etc.
- Supportive food systems – ability to package, distribute and sell
- Anyone that wanted to garden, would have access to a plot
- More readily available resources to growers – would be easier if available locally rather than having to ship up
- Education – knowledge to grow in this climate
- Part of school curriculum
- Green produce growing everywhere
- Perception shift that it is possible to grow in NWT
- Healthy local food if available and affordable
- Locally run agriculture businesses where money stays in community
- Creating jobs in community
- Land grants; Government $$ - to prove viability
  - *On a schedule that doesn't' reflect fiscal year*
- Rooftop gardens covering parking lots
- Growing 50% of our food locally
- Training institute established in Yellowknife
  - *Offshoot/satellite to Hay River Main Campus*
  - *Law against lawns*
- Defining agriculture for NWT, YK
  - *Making sure that it is a unique and WT specific definition that underscores food systems*
  - *Husbandry, harvesting, growing*
- Beautification – edible landscapes
- Soil availability programs
  - *Taking compost to the next step*
- Food systems as a centerpiece to community priorities where everyone has a place
- Front lawns for garden (refer to 50%)
- 20 produce vendors at Yellowknife farmers market (local) - - NWT
- Animals – goats, chickens, cows have a place in urban food systems
- Tiny houses – big landscape
- Land use planning strategy to find solutions to land access issues
- YK Agricultural Policy (Food System) realized
- Implementation/endorsements Yellowknife Food Security
- GMO free, organic, NWT agricultural strategy with Regional Variance based on principals of agro-ecology.
  - *Concepts here would apply to regional centre plans – supported by GNWT $/ Infrastructure, Policy, Economic program support*
- Mechanisms to support an increase in land

- Extension worker expertise available
- Northern master gardener program

NWT Vision

- Every community in NT is overall sustainable.
- Agriculture – growing
- Selling food
- Fish plant, etc.
- East NT community thriving in their agri-niche and taking part in commercial food market territorially
- Food security is not an issue!
- Each community has unique strengths that can be tapped into and used.
- Communities with good soil will grow crops and sell food within the North
- Food production within facilities, using southern exposures
- Space for growing food, and food production in winter
- Access to land for growing/gardens
- Community food storage (winter)
- Small = scale animal husbandry (i.e. co-op approach)
- Maximum levels of local food production possible
  - *Replace imports*
  - *Reduce food insecurity*
- Teaching food production in school curriculums
- Recognition of all values for good
  - *Health*
  - *Culture*
  - *Cost*
  - *Self-sufficiency*
- Traditional harvesting: working with nature's cycles to help supplement local food production
- Reduce quantity of produce that we import and grow locally
- Specialize in what does well here
- Include egg, livestock
- Creating local manures and soil amendments
- Funding needed for infra (e.g. Large greenhouse) that is tied to produce being grown locally and non-GMO
- Programs that are working against each other (e.g. Nutrition north not supporting local potatoes in NW)
- Cost of land is a barrier
- Lack of interest at political level that would otherwise result in:
  - *Policy*
  - *Funding, taxation, programming*
  - *On the ground action*
- Import replacement

Personal Contributions

- Teach by example
  - *To grow her own to cover 6 months of need*

  - *Benefit from Farmers Market greatly. Would like other communities to have a Farmers Market*
- Helping out anyone who will want to start a garden
- Strongly support buying locally
- Provide a voice for citizen concerns in the area.
- Experiment with growing more with less work (e.g. Irrigation)
- Managing pests
- Being an end user – buying local
- Spend more time outside and less in office
- Buy "NWT First"
- Track produce grown

Key Challenges

What are the most significant barriers that will need to be overcome to realize your personal vision for "thriving agriculture" in the NWT in 2035?

- Government has created obstacles (at one point we were self-sufficient)
- Inadequate policies to promote dependency
- Policies promoting dependency
- Land accessibility
- Access to high quality soil
- Transportation costs
  - *Getting supplies in (animals, feed)*
  - *Sharing produce*
- Lack of training and support in communities
- Lack of support for local leaders and trainers
- Local learning opportunities
  - *Longer term support for NFT participants as trainers*
  - *Train as teachers and support*
- Local interest/willingness and ability to participate in work aspects
  - *Confidence/skill*
  - *Support*
- Storage – would like to keep for community feasts
- Financial resources
  - *Knowing about it and how to access*
  - *Ability*
- Knowing how to price food your produce – making the business case/model
- Start-up costs
- Availability of soil
- Knowledge
- Overcoming supermarket (price, convenience)
- Competing with wage economy
- High turnover of northerners
- Short cool growing season
- Infrastructure short-comings
- Continuing support for existing infrastructure (e.g. Garden built but not continued)

- Lack of interest/awareness of connections to participate
- Communication
- Contaminated soil and no program for making sure contractors are selling soil that is fit for growing
- Need more research
- Climate change may bring more pests – need research to prepare.
- Shift in attitude and making food systems a NWT priority
- NWT Government policies current undermining northern food growing ventures.
- Soil availability
- Land availability
- Research and availability to research previously conducted.
  - *Lack of an information clearing house*
- Lack of government support/funding
- Lack of access to credit/loans – eco. to business creation
- Lack of community capacity to realize the development of a food system vision
- Access to community grants for food system development
- No access to neighbourhood to open space for community gardening
  - *Self-organizing groups*
- Organizational/ownership
  - *Barriers to maximizing the benefits of local food systems*

Key Action Priorities

Thinking about everyone's visions and challenges you heard today, which do you think are the top three issues that should be dealt with? What actions should be taken and by whom?

- Access to long-term suitable, secure land
  - *Individual: be active, participate; get municipal/city support – policies - give access to land, land clearing, identify land for growing*
- Funding – accessible (GNWT)
  - *Clarity on where Growing Forward funds go*
  - *Make pot of funding available to individual and organizations – remove barriers, easy to access*
- Community Leaders, Champions and Ability
  - *Give people land access and funding and the rest takes care of itself.*
- Leadership!
- Continuity
- Knowledge
- Marketing (increase value consciousness)
- Community Collective (NFTI?)
- "Be the change . . .
  - *Supporting passionate individuals*
- Realignment of programs and funding to reflect the understandings identified through the development and consultations of this Strategy
  - *EX:NN; Food Charter; GF2*
  - *GNWT – policy, bylaws, municipalities, land access*
- Planning for climate change
  - *Holistic in approach*

  - *Assets and resource protection, conservation into the future*
- Facilitated access to NFTI; Mentorship at community level
  - *Distance – satellite learning and info exchange*
- Access to land – meaning engagement with indigenous FN's, Governments and all stakeholders
- In short term or interim measure

Dehcho Region

Imagine you have been away for 10 years and return in 2025. An NWT Agriculture Plan has been fully implemented as part of the GNWT's Economic Opportunities Strategy. What would you see? List two examples of what you would hope to see in your community, one elsewhere in the NWT, and an example of how your life would be different due to "thriving agriculture" in the NWT in 2025.

Community Aspirations

- More crop development – V.A. products
- Healthy passionate vibrant community
- Strategy without pesticides
- Standardized processes to access land (a community plan)
- Food/farmers markets / farmer association
- Increase in preserves (traditional techniques – modernize)
- Ag centre with greenhouses – earlier start
- More soil resting
- Ag centre / Hub / food / hub
- More locally produced products and beginning plants
- About testing soils? Only a few other root veggies – carrots grew)
- What berries might grow?
- A beautiful green park with fruit trees and flowers
- A new generation of gardeners
- School gardening program (kids love to plant/grow)!!
- Every house has a back yard/front garden (boxes for those in the northern regions)
- Proper storage for root crops
- Grow enough vegetables to meet community needs
- Pre-1963 a big farm "everyone had a garden"
  - *From have to do it to wanting to do it*
- Be a successful gardener

NWT Vision

- More NWT produce
- Share our knowledge with others
- A big greenhouse producing year-round

Key Challenges

What are the most significant barriers that will need to be overcome to realize your personal vision for "thriving agriculture" in the NWT in 2035?

- people need to learn more about gardening (lack of expertise/harness existing expertise)
- Assessing commercial opportunities (new techniques, soil testing, erosion)
- Need hands on expert to work with people/industrial basis
- Access to land strategy/a community plan

Dehcho Region *(continued)*

- Cost challenge to development land – keep per unit costs down
- Many costs to preparing land
- Expertise regarding preserving / processing / packaging
- How to build up "fertile" soil (add peat moss/manure) compost
- Lack of freezer space / storage – crop loss
- Community needs to take ownership/sharing amongst ourselves
- Education/knowledge regarding new techniques – vertical farms
- Sustainable communities

Key Action Priorities

Thinking about everyone's visions and challenges you heard today, which do you think are the top three issues that should be dealt with? What actions should be taken and by whom?

- Partnership with three levels of government – village/band/GNWT – access to 'everything'
- Incentives to motivate people – to grow – cost comparison – health benefits
- Bringing 'people'/experts together / tours / market
- Identifying / access to land
- Access to outside experts – soils – technology – specific technical information
- Coordinator to help resolve problems
- Building on our history – what – how

South Slave Region

Imagine you have been away for 10 years and return in 2025. An NWT Agriculture Plan has been fully implemented as part of the GNWT's Economic Opportunities Strategy. What would you see? List two examples of what you would hope to see in your community, one elsewhere in the NWT, and an example of how your life would be different due to "thriving agriculture" in the NWT in 2025.

Community Aspirations

- More user-friendly support 1 on 1
- Commercial agriculture producers
- Regular market gardens
- Year-round local greenhouse
- Fresh food for food banks, elders
- Locally grown plants
- Orchard
- Thriving community fertility (increasing not degrading)
- Increase knowledge – growing – preserving
- Link/connect with traditional harvest
  - *Stores selling local < 3 km*
  - *90% locally produced*
- Small scale – local
- Engagement – food, land appreciation
- Access
  - *Fresh*
  - *Local*

  - *Decrease cost*
  - *Decrease Diabetes*
- School gardens – curriculum
- Greenhouse, market festival, celebration
- Food exchange network
- Unused fields used to grow
  - *Community supported agriculture*
  - *Elders*
- Fort Smith self-sufficient – one thing at a time
- Fresher food
- Extend seasons
- Livestock – chicken, turkeys, sheep, dairy
- Easier access to game/fish – store – wharf
- More space for training
- Train the trainer
  - *Training in all communities*
  - *Best Practice*
  - *Large scale and small scale*
  - *Current workshops do not focus on teaching*
- Program set-up – individual learning then teaching
- Networks and community sharing works but can be strengthened ex. successful local grocery store
- Increase support for marketing
- Farmers market – museum – events – occasional but could increase
- Agriculture and environment – water quality/quantity
- Food security
- Self-sufficient, affordable
- Locally gown healthy food for all
- Employed in agriculture
- Regulations need updating - Bylaws
- Harvest own seeds – seed exchange
- Education, greenhouses – vertical
- Fields/lots used
- Exchange of local learning
- Wild harvest
- Animal quarantine
- Abattoir service for small scale (butcher)
- Recognition of other values
- Land regulations ex. Greenhouses – permanent structures
- Municipality – need dollars to develop land (have land)
- Strategy to utilize existing land ex. Community gardens – mentored plots
- Need to re-engage community
- Coordination
- Buy all food at local market.
- Community that supports many small-scale farms

  - *Crafts – healthy, wholesome – broilers – small scale + spin-offs ex. Textiles*
  - *Attracts visitors*
- Community that produces bulk of own dairy, eggs, veggies, meat
  - *Community co-operatives – intensive work*
  - *Town support*
- Small-plot intensive (SPIN)
- Access to funding
- Access to training
- Access – land – leases
- Berry Growing – public lands
- Continuous funding for community gardens (insecurity delays planning)
- Funding for efforts that are currently volunteer
- Small-scale, family businesses – have needed flexibility
- Bylaws, policy support (not just dollars) – tools – zoning, selling
- Infrastructure to get produce to market
- Let farmers farm without separate distribution system – centralized
- Bridge small-scale and big business
- Use bigger scale knowledge to support smaller scale
- Get top dollar for our farmers
- Land, tax breaks, water, vehicles, etc. (not commercial rates)
- More connectivity
  - *Access to people, training, information*
  - *Clarity around roles, responsibilities, programs and resources (strategy can tie these together)*
- Combine
  - *Food security and traditional knowledge and culture*
  - *Elders have knowledge*
  - *Teaching in own language*
- Supportive government policy and regulations – long-term leases
- Bigger community garden incubator
- More people with own gardens
- More knowledge – preserving
- Greenhouses using waste heat
- Want to buy local vegetables
- Want to be a full-time farmer and feed my family

NWT Vision

- Enough farms to provide locally grown food
- Imports displaced
- Kids – engaged – elementary – NWT-wide program
- Community sharing – ex. Correctional project shares with Elders
- Market gardens
- Local hay production
- Access to enough affordable land
- Value-added manufactured products – sold to other communities

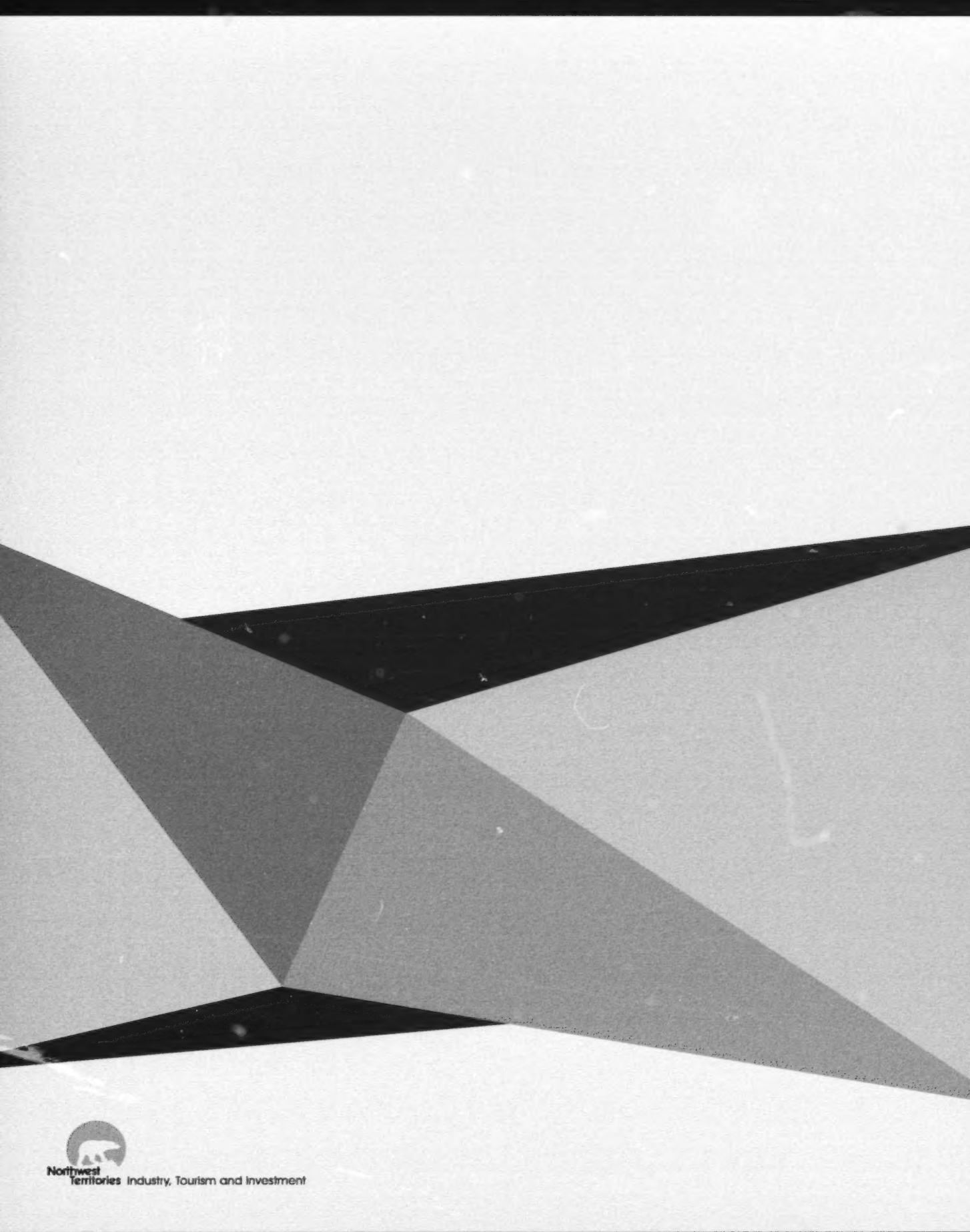
- Knowledge and facilities (commercial kitchen ex.)
- Well-paid government jobs

Key Action Priorities

- Need for re-defining role of agriculture
  - *Not strictly agricultural*
- Personal and community based vs agriculture
  - *Can be measured*
  - *Displaced food*
  - *Communities accepting other values*
- Wealth ↑ with lower income
  - *Spin-off values – ex. Toronto Kitchener growing food – grew into other services*
    - *Grass-roots vision*
    - *Community strengths*

Other Inputs

- Seed libraries
- Harvesting accessible to all – we support one another – model of abundance – scarcity
- Global changes needed
- Planning/coordination
- Fermentation/root cellar – community
- Leases – agriculture (in Alberta H2O restrictions)
- Regulations for wildlife without livestock (protection)
- Egg quota < 100 (Alberta is 1,000)
- Federal enforcement presented barriers
- Development of mission farms as resource
- Other northern successes (Sweden)
  - *Berries, moose, reindeer, dairy*
- Experimental farm reinstated
- Requires longer-term investment – Fiddle Head ex – 5 years to establish
- Or rice – self-sustaining in dwarf state
- Trials take time
- Use regional strengths – work together across regions
- People realize they need to grow own food again.
- Manufactured products.
- Opportunities for distribution of tools, soils, seeds, etc.
- Reindeer herd can triple.



Northwest Territories Industry, Tourism and Investment